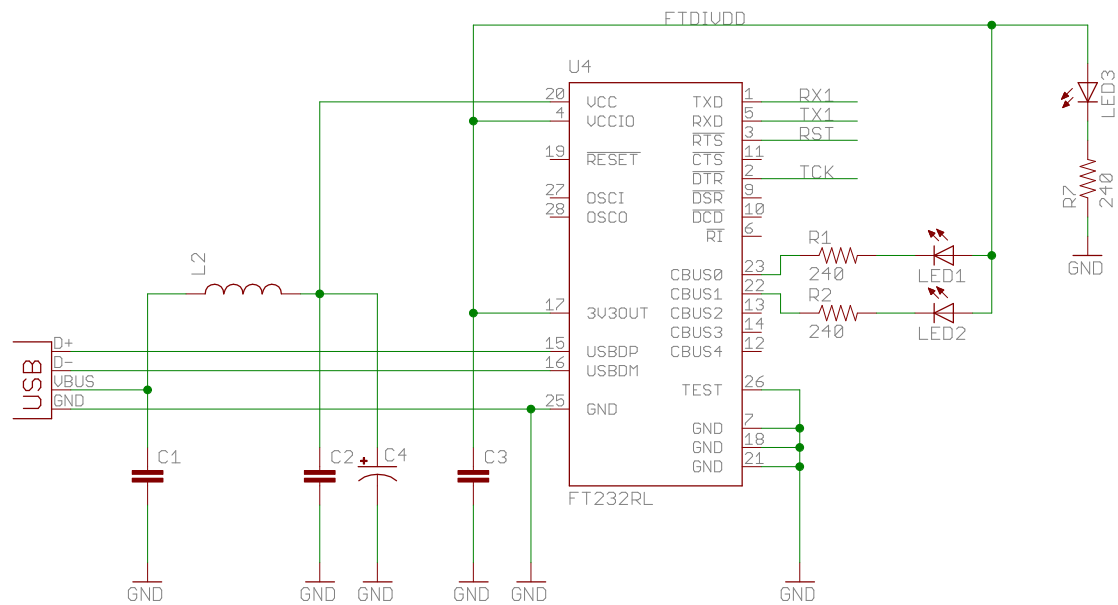
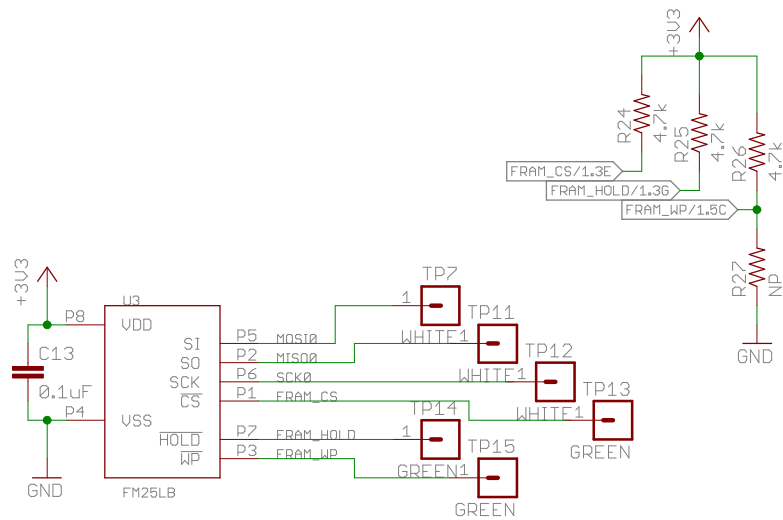


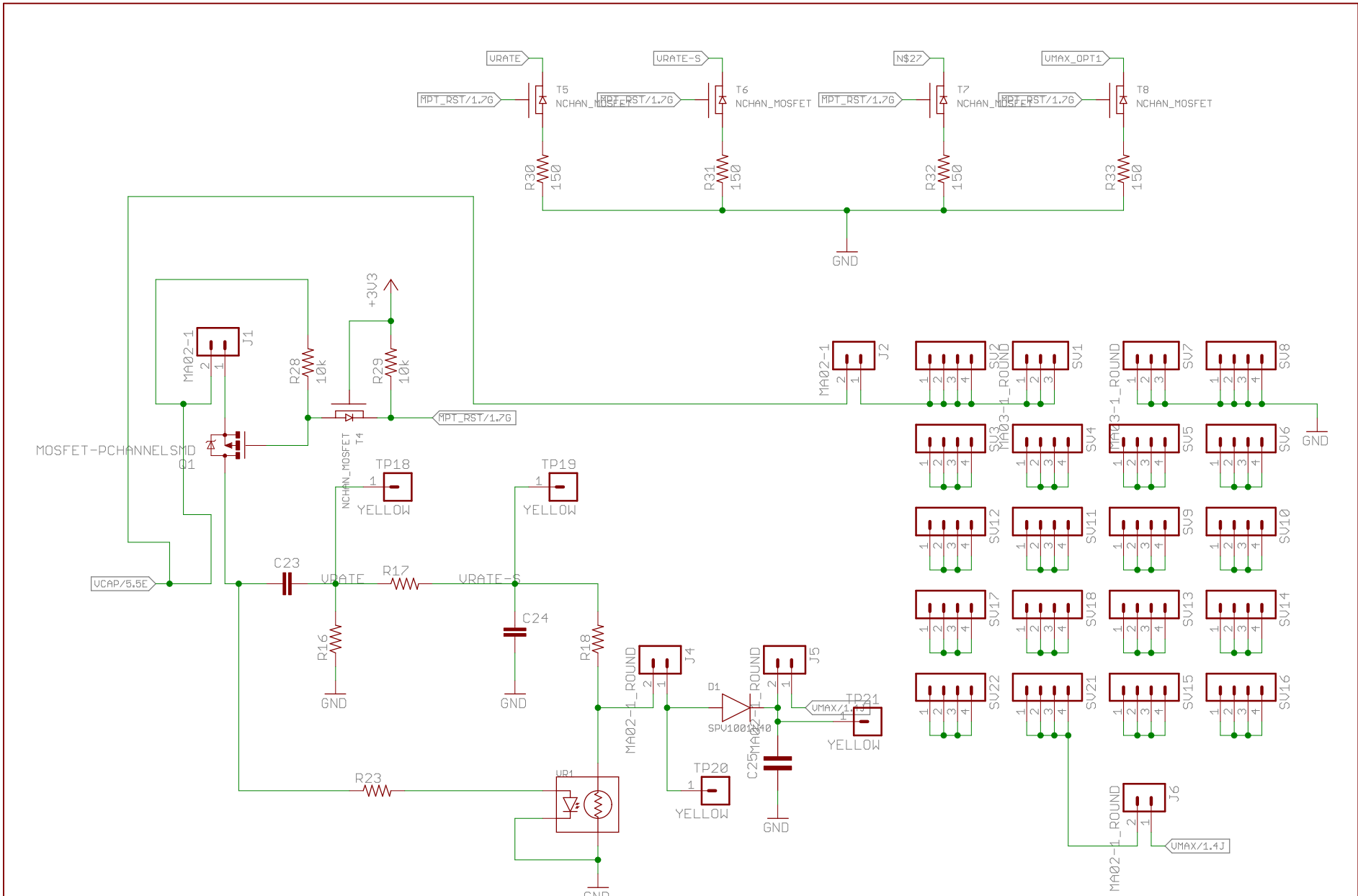
	REV: B
	Author: Sam Debruin
Date: 1/27/14 3:21 PM	Sheet: 1/5



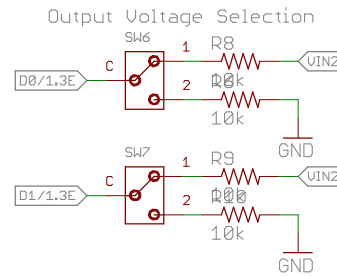
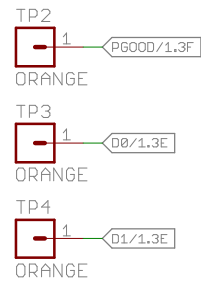
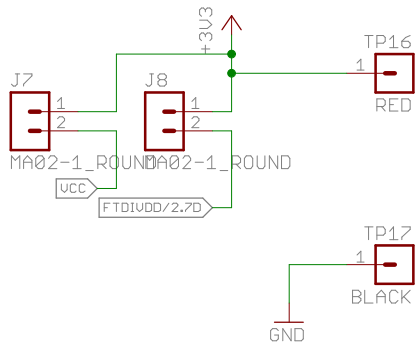
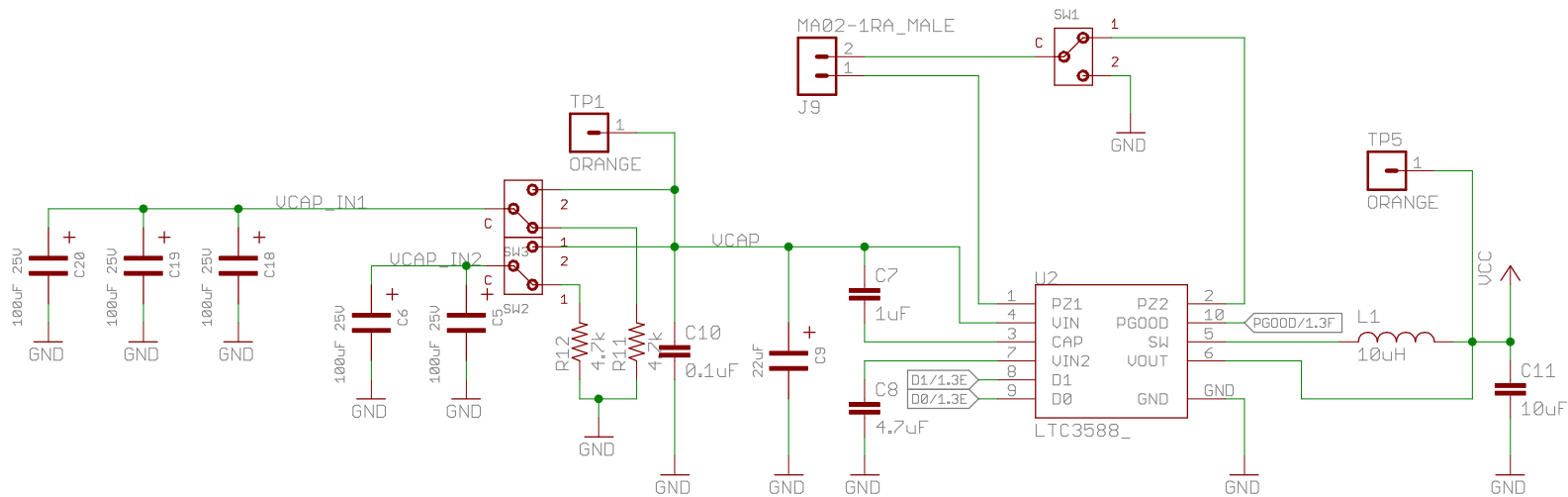
M Coilcube Test		REV: B
Author: Sam Debruin		
Date: 1/27/14 3:21 PM		Sheet: 2/5



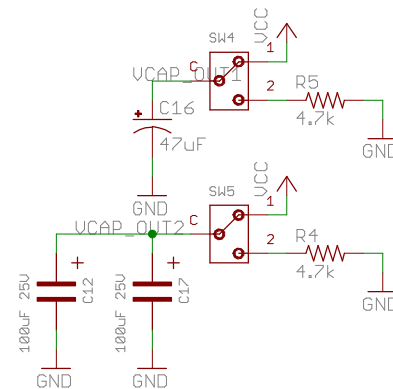
M	Coilcube Test		REV: B
	Author: Sam Debruin		
	Date: 1/27/14 3:21 PM		Sheet: 3/5



M Coilcube Test		REV: B
Author: Sam Debruin		
Date: 1/27/14 3:21 PM		Sheet: 4/5



Additional Output Capacitance



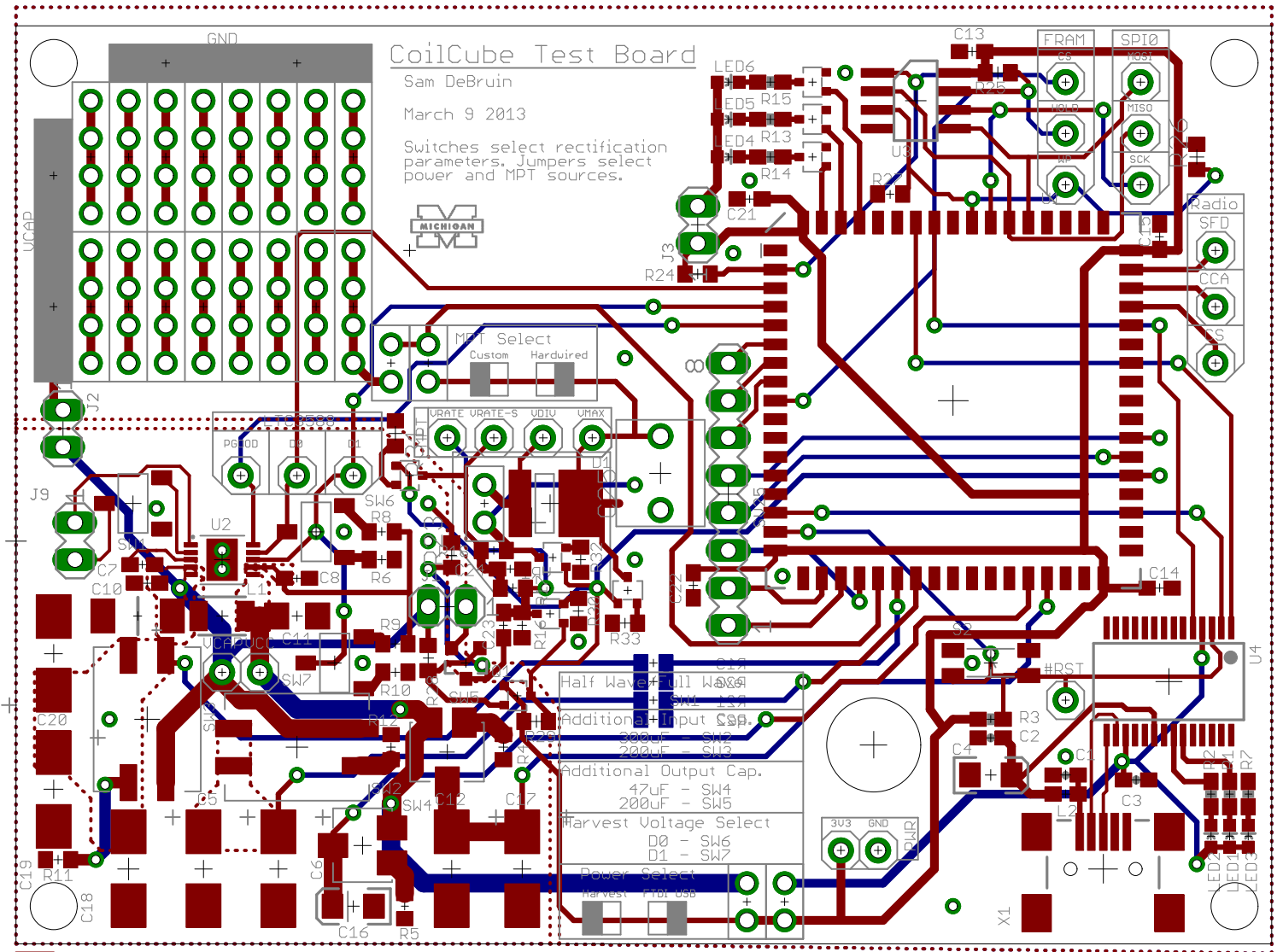
M Coilcube Test

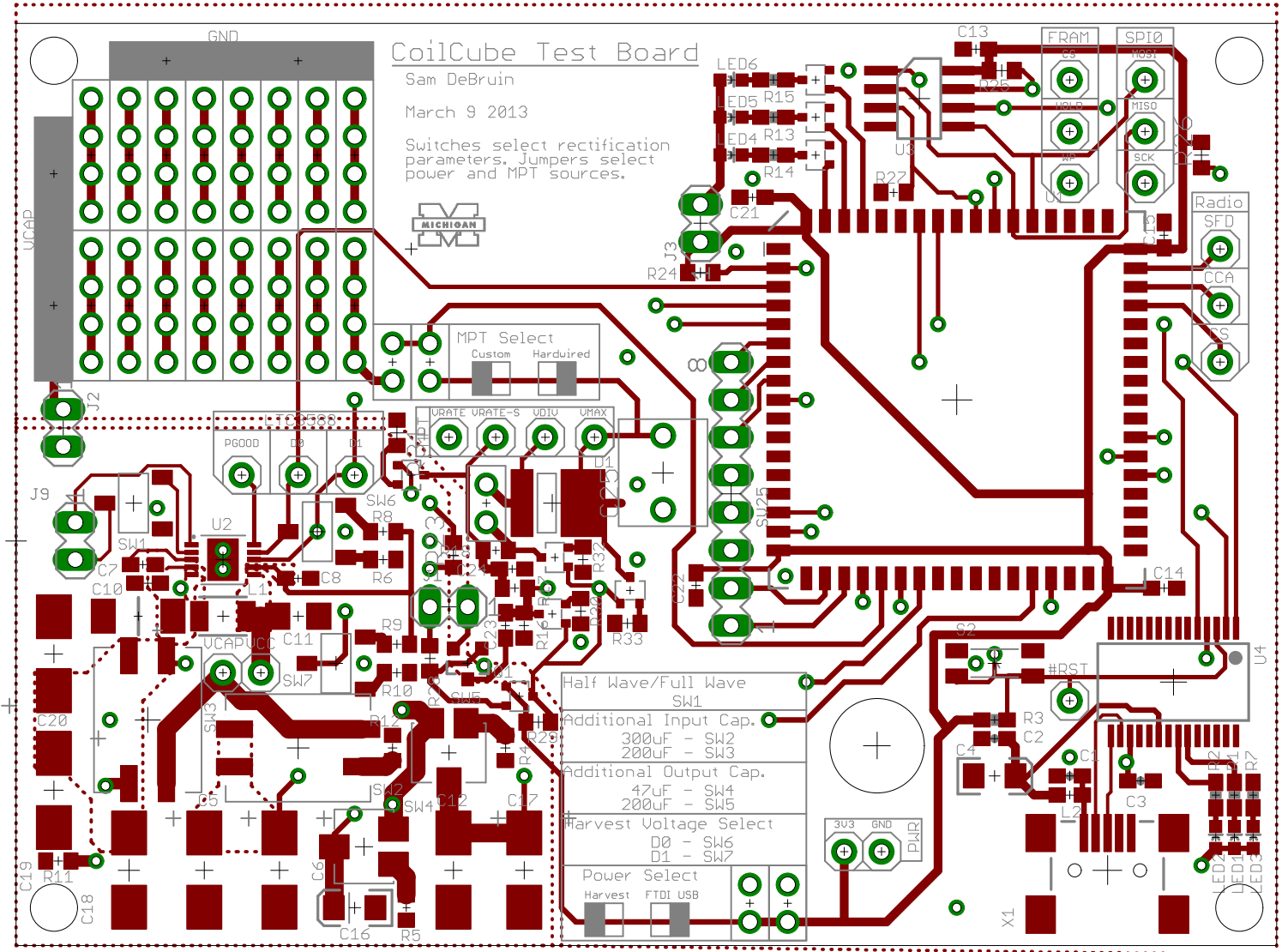
REV:
B

Author: Sam Debruin

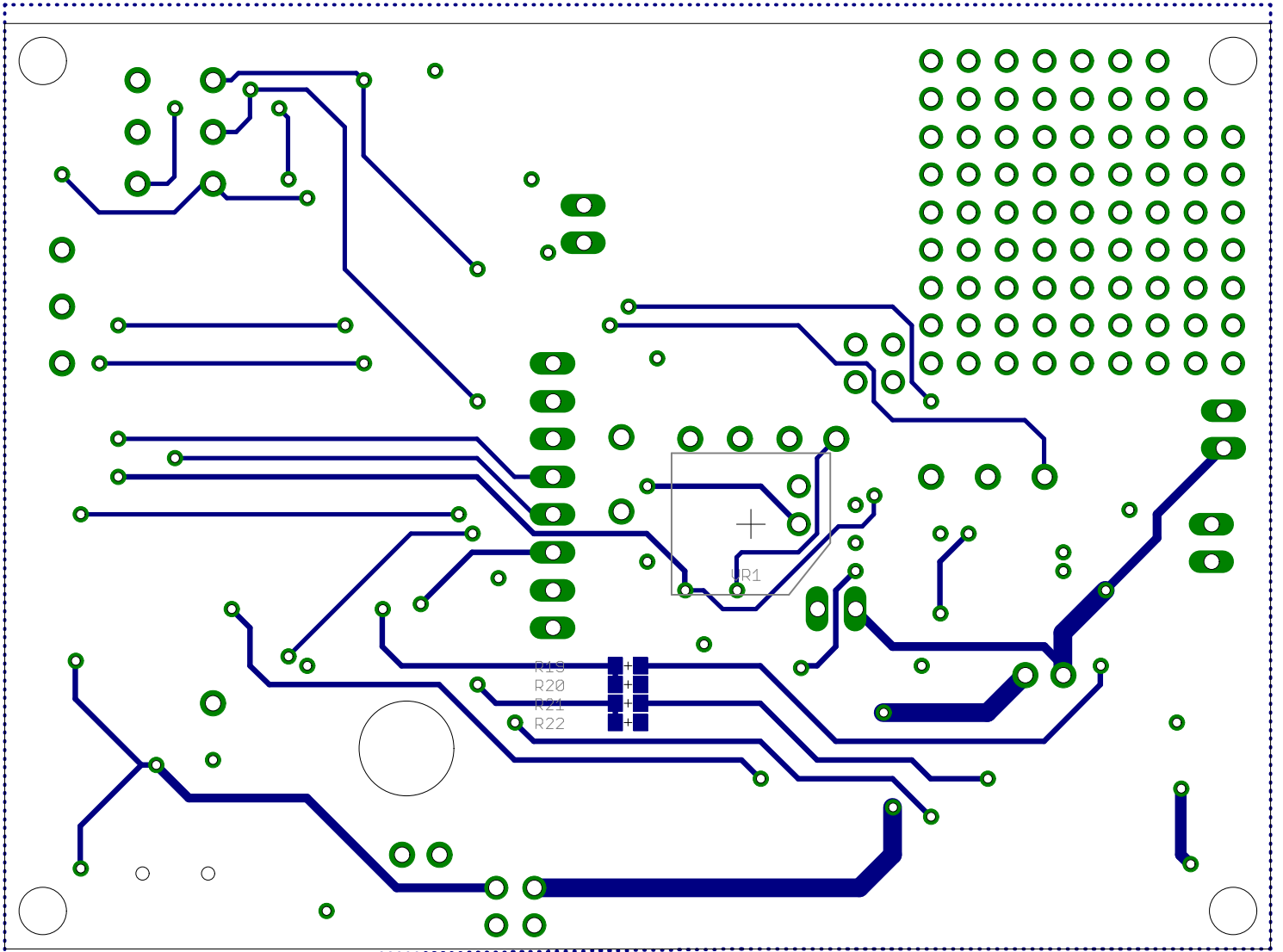
Date: 1/27/14 3:21 PM

Sheet: 5/5

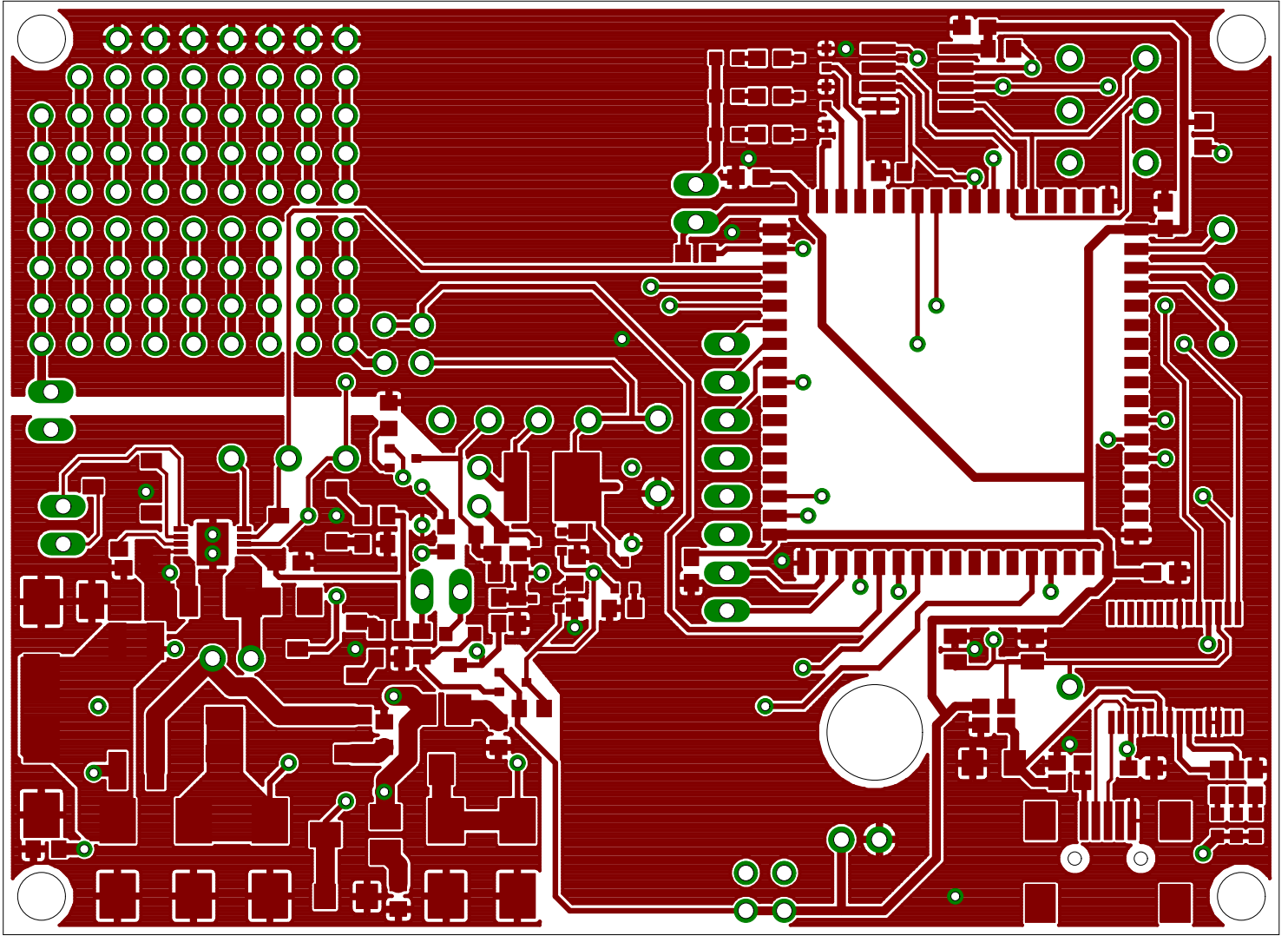




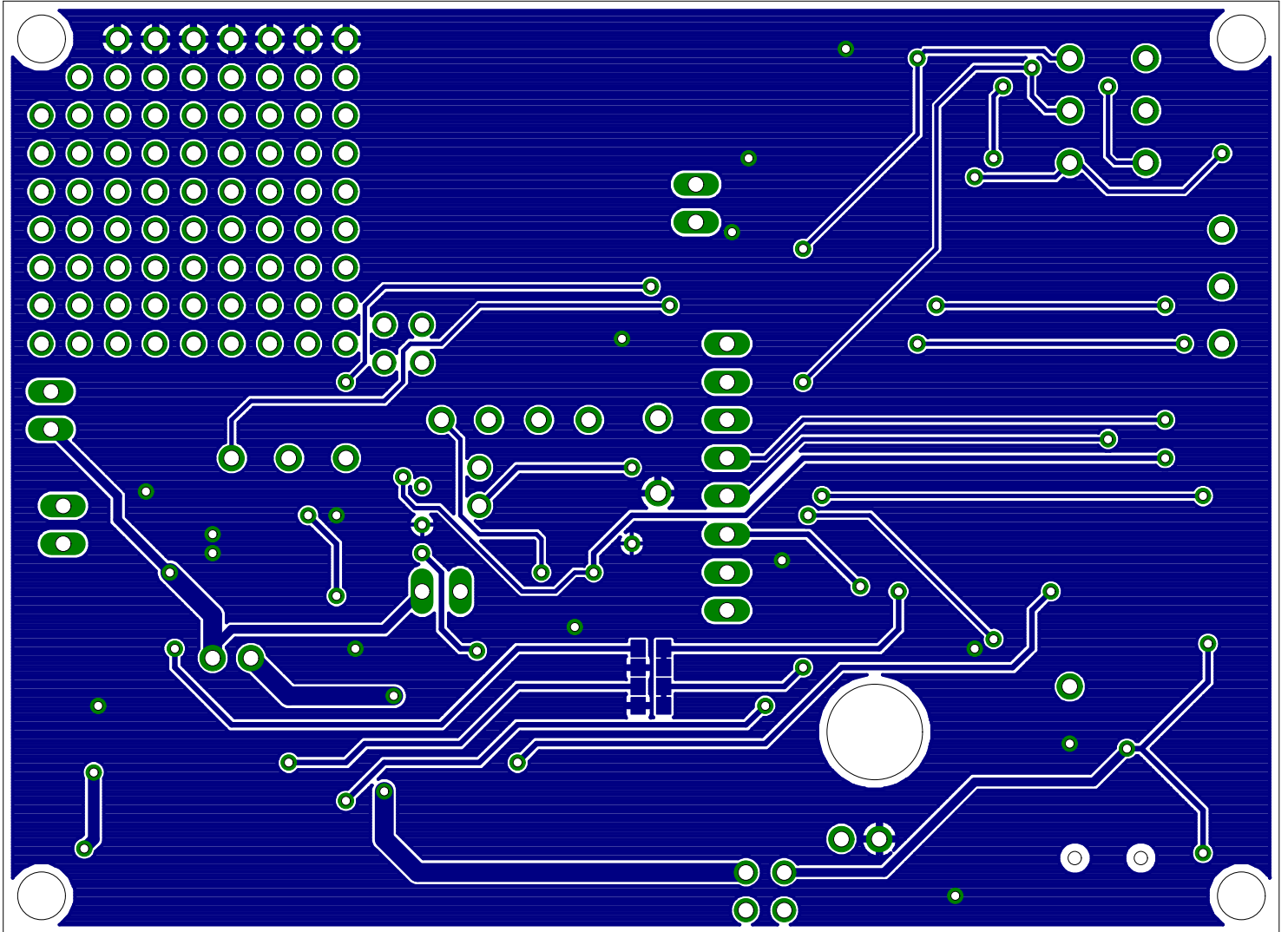
Bottom Layer



Top Copper Layer



Bottom Copper Layer



Top Paste Layer with Silkscreen

CoilCube Test Board

Sam DeBruin

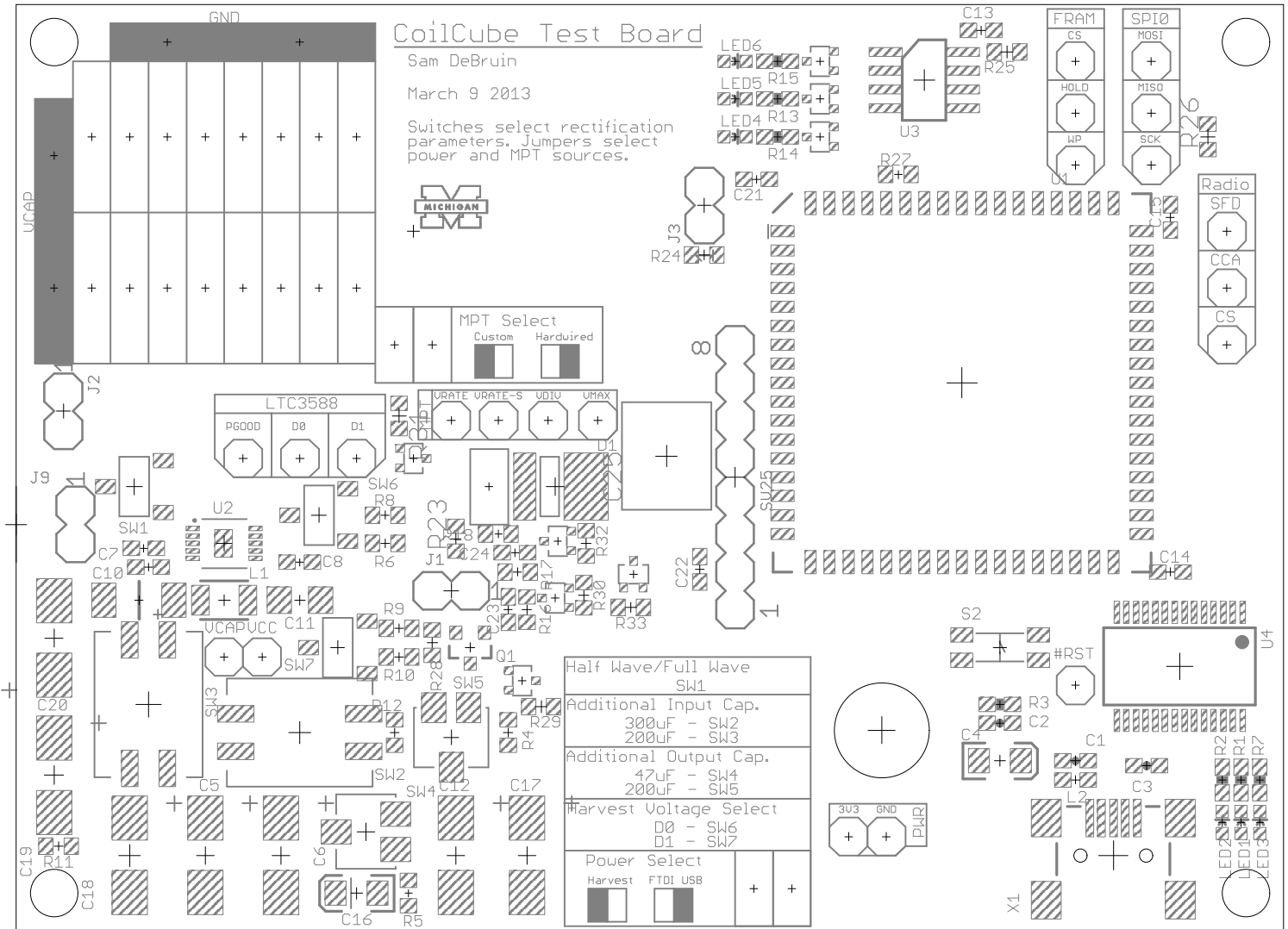
March 9 2013

Switches select rectification parameters. Jumpers select power and MPT sources.

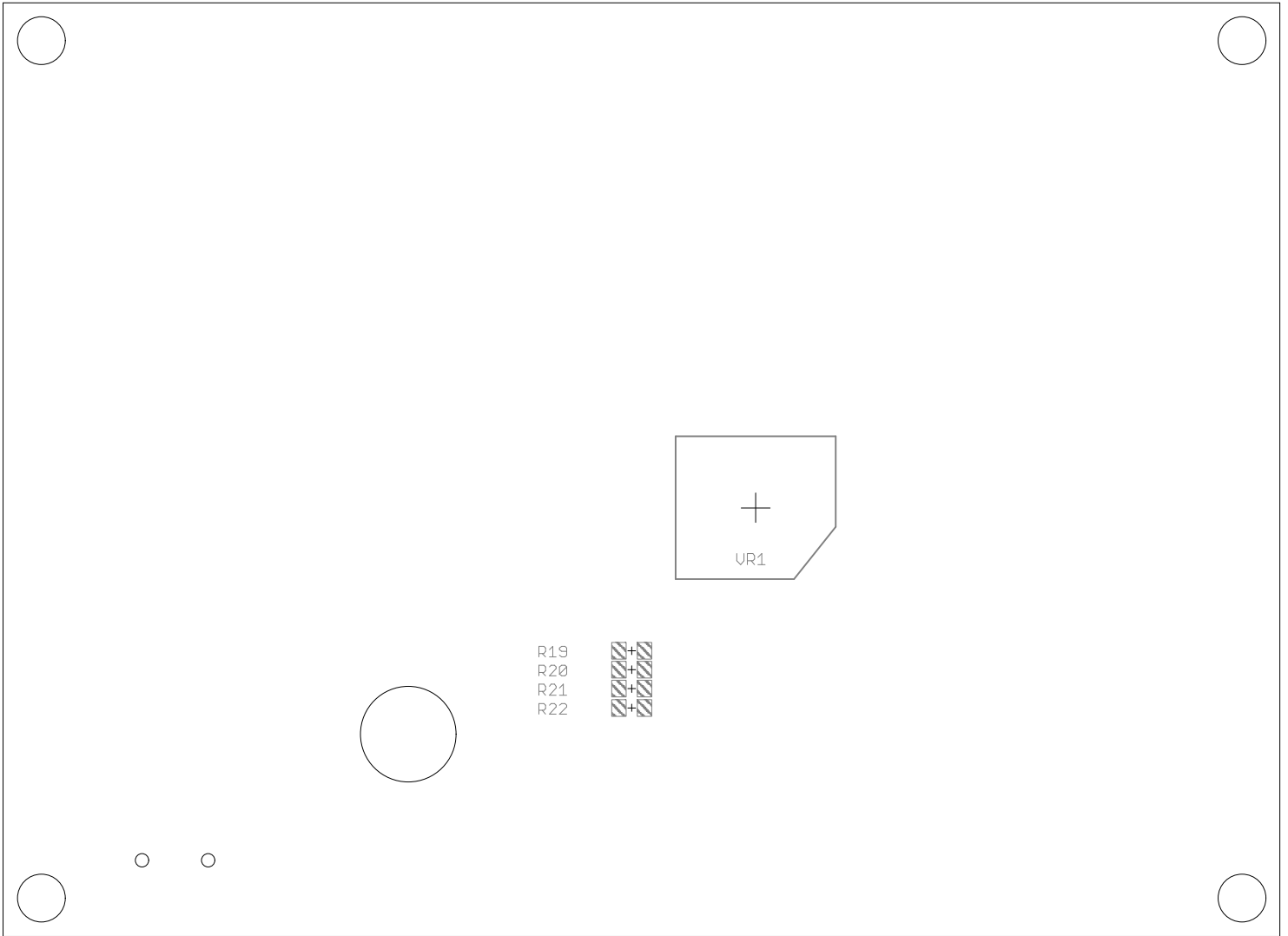


MPT Select	
Custom	Hardwired
<input type="checkbox"/>	<input type="checkbox"/>

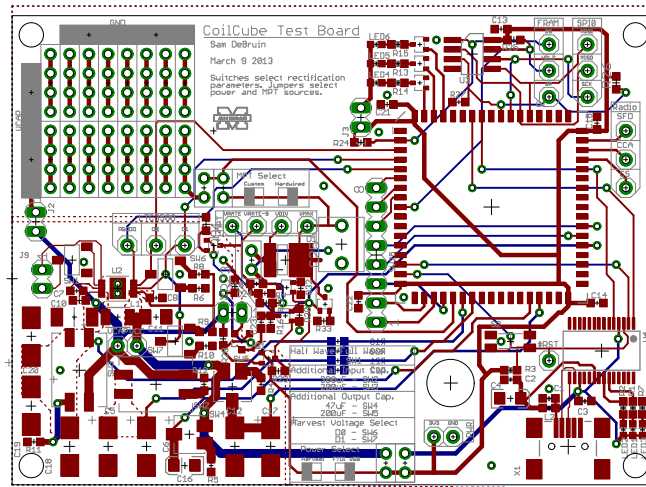
Half Wave/Full Wave		SW1	
Additional Input Cap.		300uF - SW2	
		200uF - SW3	
Additional Output Cap.		47uF - SW4	
		200uF - SW5	
Harvest Voltage Select		D0 - SW6	
		D1 - SW7	
Power Select		Harvest	
		FTDI USB	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>



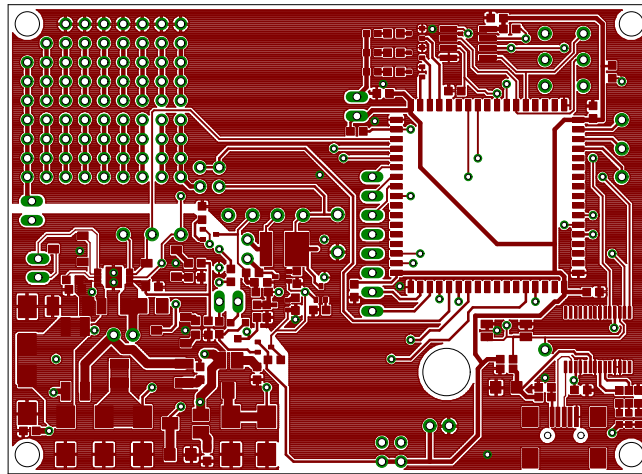
Bottom Paste Layer with Silkscreen



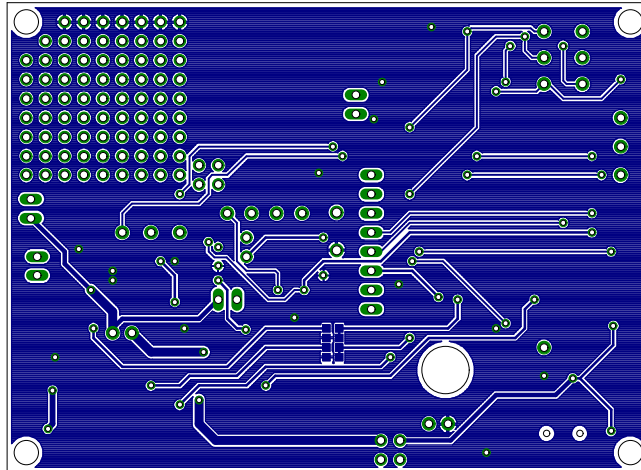
Top and Bottom Layers 1:1 Scale



Top Layer 1:1 Scale



Bottom Copper Layer 1:1 Scale



Part	Value	Device	Package	Description	DIGKEY	DIGKEY1	DIGKEY2	MF	MPN	NEWARK	OC_FARNELL	OC_NEWARK
C1		CAP0603-CAP	0603-CAP	Capacitor	445-1316-1-ND							
C2		CAP0603-CAP	0603-CAP	Capacitor	445-1316-1-ND							
C3		CAP0603-CAP	0603-CAP	Capacitor	445-1316-1-ND							
C4		CAP_POL1206	EIA3216	Capacitor Polarized	478-1555-1-ND							
C5	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C6	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C7	1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1321-1-ND							
C8	4.7uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1321-1-ND							
C9	22uF	2312_CAP_POL	2312_CAP_POL		478-3102-1-ND							
C10	0.1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1316-1-ND							
C11	10uF	C-EUC1206	C1206	CAPACITOR, European symbol	399-8152-1-ND							
C12	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C13	0.1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1316-1-ND							
C14	0.1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1316-1-ND							
C15	0.1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1316-1-ND							
C16	47uF	CAP_POL1206	EIA3216	Capacitor Polarized	399-3700-1-ND							
C17	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C18	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C19	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C20	100uF 25V	2917_CAP_POL	2917_CAP_POL		399-5175-1-ND							
C21	0.1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1316-1-ND							
C22	0.1uF	C-EUC0603	C0603	CAPACITOR, European symbol	445-1316-1-ND							
C23		C-EUC0603	C0603	CAPACITOR, European symbol								
C24		C-EUC0603	C0603	CAPACITOR, European symbol								
C25		POLYPRO_CAP	POLYPRO_CAP									
D1	SPV1001N40	SPV1001N40	SPV1001N40		8C2054-ND	399-7638-ND	399-7689-ND					
J1	MA02-1	MA02-1	MA02-1		497-12077-1-ND							
J2	MA02-1	MA02-1	MA02-1		609-3500-ND							
J3	MA02-1	MA02-1	MA02-1		609-3500-ND							
J4	MA02-1_ROUND	MA02-1_ROUND	MA02-1_ROUND		609-3500-ND							
J5	MA02-1_ROUND	MA02-1_ROUND	MA02-1_ROUND		A26228-ND							
J6	MA02-1_ROUND	MA02-1_ROUND	MA02-1_ROUND		A26567-ND							
J7	MA02-1_ROUND	MA02-1_ROUND	MA02-1_ROUND		A26567-ND							
J8	MA02-1_ROUND	MA02-1_ROUND	MA02-1_ROUND		A26228-ND							
J9	MA02-1RA_MALE	MA02-1RA_MALE	MA02-1RA_MALE		3M9467-ND							
L1	10uH	INDUCTOR1210	1210	Inductors	587-1625-1-ND							
L2		INDUCTOR0603	603	Inductors	240-2373-1-ND							
LED1		LED0603	LED-0603	LEDs	1080-1400-1-ND							
LED2		LED0603	LED-0603	LEDs	1080-1405-1-ND							
LED3		LED0603	LED-0603	LEDs	1080-1405-1-ND							
LED4		LED0603	LED-0603	LEDs	1080-1405-1-ND							
LED5		LED0603	LED-0603	LEDs	1080-1405-1-ND							
LED6		LED0603	LED-0603	LEDs	1080-1405-1-ND							
Q1	MOSFET-PCHANNELMSMD	MOSFET-PCHANNELMSMD	SOT723-3	Generic PMOSFET	24XMP120F FTR-ND							
R1		RESISTOR0603-RES	0603-RES	Resistor	P240GCT-ND							
R2		RESISTOR0603-RES	0603-RES	Resistor	P240GCT-ND							
R3	10k	RESISTOR0603-RES	0603-RES	Resistor	P10KGCT-ND							
R4	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R5	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R6	10k	R-US_R0603	R0603	RESISTOR, American symbol	P10KGCT-ND							
R7		RESISTOR0603-RES	0603-RES	Resistor	P240GCT-ND							
R8	10k	R-US_R0603	R0603	RESISTOR, American symbol	P10KGCT-ND							
R9	10k	R-US_R0603	R0603	RESISTOR, American symbol	P10KGCT-ND							
R10	10k	R-US_R0603	R0603	RESISTOR, American symbol	P10KGCT-ND							
R11	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R12	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R13		RESISTOR0603-RES	0603-RES	Resistor	P240GCT-ND							
R14		RESISTOR0603-RES	0603-RES	Resistor	P240GCT-ND							
R15		RESISTOR0603-RES	0603-RES	Resistor	P240GCT-ND							
R16		R-US_R0603	R0603	RESISTOR, American symbol								
R17		R-US_R0603	R0603	RESISTOR, American symbol								
R18		R-US_R0603	R0603	RESISTOR, American symbol								
R19	900k	R-US_R0603	R0603	RESISTOR, American symbol								
R20	100k	R-US_R0603	R0603	RESISTOR, American symbol								
R21	900k	R-US_R0603	R0603	RESISTOR, American symbol								
R22	100k	R-US_R0603	R0603	RESISTOR, American symbol								
R23		R-US_R0603	R0603	RESISTOR, American symbol								
R24	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R25	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R26	4.7k	R-US_R0603	R0603	RESISTOR, American symbol	P4.7KGCT-ND							
R27	10k	R-US_R0603	R0603	RESISTOR, American symbol								
R28	10k	R-US_R0603	R0603	RESISTOR, American symbol	P10KGCT-ND							
R29	10k	R-US_R0603	R0603	RESISTOR, American symbol	P10KGCT-ND							
R30		R-US_R0603	R0603	RESISTOR, American symbol	RHM150DCT-ND							
R31	150	R-US_R0603	R0603	RESISTOR, American symbol	RHM150DCT-ND							
R32	150	R-US_R0603	R0603	RESISTOR, American symbol	RHM150DCT-ND							
R33	150	R-US_R0603	R0603	RESISTOR, American symbol	RHM150DCT-ND							
S1	SWITCH-OFF-MOM	SWITCH-OFF-MOM	SWITCH-OFF-MOM		P110845CT-ND							
SV1	MA03-1_ROUND	MA03-1_ROUND	MA03-1_ROUND									
SV2		MA04-1_ROUND	MA04-1_ROUND									
SV3		MA04-1_ROUND	MA04-1_ROUND									
SV4		MA04-1_ROUND	MA04-1_ROUND									
SV5		MA04-1_ROUND	MA04-1_ROUND									
SV6		MA04-1_ROUND	MA04-1_ROUND									
SV7	MA03-1_ROUND	MA03-1_ROUND	MA03-1_ROUND									
SV8		MA04-1_ROUND	MA04-1_ROUND									
SV9		MA04-1_ROUND	MA04-1_ROUND									
SV10		MA04-1_ROUND	MA04-1_ROUND									
SV11		MA04-1_ROUND	MA04-1_ROUND									
SV12		MA04-1_ROUND	MA04-1_ROUND									
SV13		MA04-1_ROUND	MA04-1_ROUND									
SV14		MA04-1_ROUND	MA04-1_ROUND									
SV15		MA04-1_ROUND	MA04-1_ROUND									
SV16		MA04-1_ROUND	MA04-1_ROUND									
SV17		MA04-1_ROUND	MA04-1_ROUND									
SV18		MA04-1_ROUND	MA04-1_ROUND									
SV21		MA04-1_ROUND	MA04-1_ROUND									
SV22		MA04-1_ROUND	MA04-1_ROUND									
SV25		MA08-1	MA08-1	PIN HEADER	A26554-ND					unknown		unknown
SW1	SWITCH_SPDP	SWITCH_SPDP	SWITCH_SPDP		563-1021-1-ND							
SW2	SWITCH_SPDT_HV2	SWITCH_SPDT_HV2	SWITCH_SPST_HV		CT204121ST-ND							
SW3	SWITCH_SPDT_HV2	SWITCH_SPDT_HV2	SWITCH_SPST_HV		CT204121ST-ND							
SW4	SWITCH_SPDT_HV	SWITCH_SPDT_HV	SWITCH_SPDT_HV		563-1031-1-ND							
SW5	SWITCH_SPDT_HV	SWITCH_SPDT_HV	SWITCH_SPDT_HV		563-1031-1-ND							
SW6	SWITCH_SPDP	SWITCH_SPDP	SWITCH_SPDP		563-1021-1-ND							
SW7	SWITCH_SPDP	SWITCH_SPDP	SWITCH_SPDP		563-1021-1-ND							
T1	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T2	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T3	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T4	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T5	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T6	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T7	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
T8	NCHAN_MOSFET	NCHAN_MOSFET	NCHAN_MOSFET		568-3244-1-ND							
TP1	ORANGE	MA01-1	MA01-1		5003K-ND							
TP2	ORANGE	MA01-1	MA01-1		5003K-ND							
TP3	ORANGE	MA01-1	MA01-1		5003K-ND							
TP4	ORANGE	MA01-1	MA01-1		5003K-ND							
TP5	ORANGE	MA01-1	MA01-1		5003K-ND							
TP6	WHITE	MA01-1	MA01-1		5002K-ND							
TP7	WHITE	MA01-1	MA01-1		5002K-ND							
TP8	WHITE	MA01-1	MA01-1		5002K-ND							
TP9	WHITE	MA01-1	MA01-1		5002K-ND							
TP10	WHITE	MA01-1	MA01-1		5002K-ND							
TP11	WHITE	MA01-1	MA01-1		5002K-ND							
TP12	WHITE	MA01-1	MA01-1		5002K-ND							
TP13	GREEN	MA01-1	MA01-1		5116K-ND							
TP14	GREEN	MA01-1	MA01-1		5116K-ND							
TP15	GREEN	MA01-1	MA01-1		5116K-ND							
TP16	RED	MA01-1	MA01-1		5000K-ND							
TP17	BLACK	MA01-1	MA01-1		5003K-ND							
TP18	YELLOW	MA01-1	MA01-1		5004K-ND							
TP19	YELLOW	MA01-1	MA01-1		5004K-ND							
TP20	YELLOW	MA01-1	MA01-1		5004K-ND							
TP21	YELLOW	MA01-1	MA01-1		5004K-ND							
U1	EPIC_CORE_A	EPIC_CORE_A	EPIC-LCC68									
U2	LTC3588	LTC3588	MSP0P-10-GNDPAD	Energy Harvesting Power Supply	LTC3588EMSE-1#PBF-ND							
U3	FM25LB	FM25LB	SOIC-8		428-3216-ND							
U4	FT232RL	FT232RL	SSOP28	Source: http://www.ftdichip.com/Documents/DataSheets/DS_FT232RL_v104.pdf	768-1007-1-ND				FT232RL	1146032	91K9318	
VR1	VTLS5C7	VTLS5C7	VACTROL VTLS5C7									